## ABSTRACT OF THE DISCLOSURE

An intake air control apparatus for an engine can relax the tolerance of positional accuracy in the mounting of a rotational angle detection sensor. The intake air control apparatus includes: a shaft (6); a throttle valve (7) fixedly secured to the shaft (6) for adjusting the degree of opening in an intake passage through a rotational angle thereof; a permanent magnet (12) provided on an end portion of the shaft (6) with its N pole and S pole being positioned in a diametral direction thereof; and a rotational angle detection sensor (14) having a magnetoresistive element disposed in a spaced parallel relation with respect to the permanent magnet (12) for detecting a change in the azimuth of magnetic flux of the permanent magnet (12) thereby to sense a rotational angle of the throttle valve (7).